

LIST OF ABBREVIATIONS IN THE CWCS

ACOE	US Army Corp of Engineers	http://www.usace.army.mil/
BCR	Bird Conservation Region	
BLM	US Bureau of Land Management	www.mt.blm.gov
BMP	Best Management Practice	
CARA	Conservation and Reinvestment Act	http://www.teaming.com/
CBM	Coalbed Methane	
CRP	Conservation Reserve Program	http://www.fsa.usda.gov/dafp/cepd/crp.htm
CVB/CC	Convention and Visitors Bureau or Chambers of Commerce	http://www.ndtourism.com/Resources/
CWCS	Comprehensive Wildlife Conservation Strategy	
DAT	District Assistance Team	
DU	Ducks Unlimited	http://www.ducks.org/
EPA	Environmental Protection Agency	http://www.epa.gov/
ESA	Endangered Species Act	
FAA	Federal Aviation Administration	http://www.faa.gov/
FHWA	Federal Highway Administration	http://www.fhwa.dot.gov/
FNAWS	Foundation for North American Wild Sheep	http://www.fnaws.org/
FSA	Farm Service Agency	http://www.fsa.usda.gov/pas/
FY	Fiscal Year	
GFAFB	Grand Forks Air Force Base	http://public.grandforks.amc.af.mil/
GIS	Geographic Information System	
HAPET	Habitat and Population Evaluation Team	
JV	Joint Venture	http://www.fws.gov/birdhabitat/nawmp/jv.htm
MDF	Mule Deer Foundation	http://www.muledeer.org/
MN	Minnesota	
MT	Montana	
NAAT	National Advisory Acceptance Team	
NABCI	North American Bird Conservation Initiative	http://www.nabci-us.org/
NAWCP	North American Waterbird Conservation Plan	http://www.nacwcp.org/
NAWMP	North American Waterfowl Management Plan	http://www.fws.gov/birdhabitat/nawmp/nawmphp.htm
ND	North Dakota	
NDDAG	North Dakota Department of Agriculture	http://www.agdepartment.com/
NDDH	North Dakota Department of Health	http://www.health.state.nd.us/
NDFS	North Dakota Forest Service	http://www.ndsu.nodak.edu/forests-service/
NDGFD	North Dakota Game and Fish Department	http://www.nd.gov/gnf/
NDIC	North Dakota Industrial Commission – Oil and Gas Division	http://www.oilgas.nd.gov/
NDNRT	North Dakota Natural Resource Trust	http://www.ndnrt.com/
NDPRD	North Dakota Parks and Recreation Department	http://www.parkrec.nd.gov/

NDSEED	Sustainable Energy for Economic Development	http://www.ndseed.org/
NDSL	North Dakota State Land Department	http://www.land.state.nd.us/
NDSUEXT	North Dakota State University Extension Service	http://www.ext.nodak.edu/
NDSWC	North Dakota State Water Commission	http://www.swc.state.nd.us/
NDT	North Dakota Tourism	http://www.ndtourism.com/
NDWCA	North Dakota Weed Control Association	http://www.ndweeds.homestead.com/index.html
NDWRB	North Dakota Water Resource Boards (County)	http://www.swc.state.nd.us/4DLink5/4dcgi/wrboards
NGO	Nongovernmental Organization	
NGPJV	Northern Great Plains Joint Venture	
NP/PPR	Northern Plains/Prairie Potholes Regional Shorebird Conservation Plan	http://www.fws.gov/shorebirdplan/RegionalShorebird/RegionalPlans.htm
NPPWCP	Northern Prairie and Parkland Waterbird Conservation Plan	http://www.fws.gov/birds/waterbirds/npp/
NPWRC	Northern Prairie Wildlife Research Center	http://www.npwrc.usgs.gov/
NRCS	Natural Resources Conservation Service	http://www.nrcs.usda.gov/
PF	Pheasants Forever	http://www.pheasantsforever.org/
PIF	Partners in Flight	http://www.partnersinflight.org/
PPJV	Prairie Pothole Joint Venture	http://www.ppjv.org
RMEF	Rocky Mountain Elk Foundation	http://www.rmef.org/
RRBRP	Red River Basin Riparian Project	http://www.health.state.nd.us/rrbrp/
SD	South Dakota	
SoCP	Species of Conservation Priority	
SWG	State Wildlife Grants	http://www.teaming.com/
T&E	Threatened and Endangered	
TNC	The Nature Conservancy	http://www.nature.org/
TRNP	Theodore Roosevelt National Park	http://www.nps.gov/thro/
UND	University of North Dakota	http://www.und.edu/
USBR	US Bureau of Reclamation	http://www.usbr.gov/
USDA	US Department of Agriculture	http://www.usda.gov/wps/portal/usdahome
USFS	US Forest Service	http://www.fs.fed.us/
USFWS	US Fish and Wildlife Service	http://www.fws.gov/
USNPS	US National Park Service	http://www.nps.gov/
USSCP	US Shorebird Conservation Plan	http://www.fws.gov/shorebirdplan/
WCRP	Wildlife Conservation and Restoration Program	http://www.teaming.com/
WIND	Wind Interests of North Dakota	http://www.windnd.com/
WS/APHIS	Wildlife Services/Animal Plant and Health Inspection Service	http://www.aphis.usda.gov/ws/

ACKNOWLEDGEMENTS

The North Dakota Game and Fish Department is grateful to the individuals, agencies, and organizations who have taken the time to meet and discuss the CWCS. Over the past several years, NDGFD nongame staff has met with people from numerous state, federal, and non-governmental organizations. These meetings have allowed us the opportunity to inform others on the State Wildlife Grant program, the CWCS, and enhance our partnerships. Much credit is owed to those who have taken the time to meet with us, supported us, and provided feedback to help shape this document.

The list of those who knowingly or unknowingly provided their support and input is extensive. To all of you not named below, know that your enthusiasm for conservation is embedded throughout this document. We are particularly grateful to colleagues at the North Dakota Game and Fish Department who have helped administer the State Wildlife Grants, delivered information, provided endless encouragement, and those who just listened. Special recognition is owed to Duane Pool, Northern Great Plains Joint Venture science coordinator, for his writing assistance and to Craig Bihle, NDGFD Communications Supervisor, for editing.

Also, much gratitude goes to the Teaming With Wildlife coalition and all those at the forefront of the State Wildlife Grant program.

Those who we have had individual, organized meetings with:

Jane Austin (NPWRC), Bill Bicknell (USFWS), Will Bleier (NDSU), Mike Brand (NDSLD), Joel Brice (Delta), Mark Clark (NDSU), Rich Crawford (UND), Dave Dewald (NRCS), Christine Dirk (NDNHP), Kathy Duttonhefner (NDNHP), Mike Estey (HAPET), Jim Grier (NDSU), Dan Hare (PF), Larry Igl (NPWRC), Doug Johnson (NPWRC), Wade King (USFWS), Karen Kreil (USFWS), Phil Morris (ACOE), Gary Neuchtlerein (NDSU), Bob Newman (UND), Neal Niemuth (HAPET), Pam Pietz (NPWRC), Wendy Reed (NDSU), Ron Reynolds (HAPET), Jim Ringleman (DU), Eric Rosenquist (TNC), Terri Shaffer (NPWRC), Jill Shaffer (NPWRC), Donna Schneider (Audubon), Andy Schollett (NGPJV), Mark Sherfy (NPWRC), Tom Sklebar (NPWRC), Marsha Sovada (NPWRC), Scott Stephens (DU), Craig Stockwell (NDSU), Larry Strong (NPWRC), Dan Svingen (USFS), Rick Sweitzer (UND), Genevieve Thompson (Audubon), Ralph Tramontano, Keith Trego (NDNRT), Jeff Towner (USFWS), Tim Zachmeier (BLM)

Those who attended the CWCS Joint Mammal, Reptile, and Amphibian Meeting:

Steve Dyke (NDGFD), Jacquie Ermer (USFWS), Dorothy Fecske (NDGFD), Jim Grier (NDSU), Sandy Hagen (NDGFD), Patrick Isakson (NDGFD), Ron Jyring (BSC), Bob Newman (UND), Bob Seabloom (UND), Marsha Sovada (NPWRC), Rick Sweitzer (UND), Ralph Tramontano

Those who attended the CWCS Aquatics Expert Meeting:

Bill Bicknell (USFWS), Mike Eli (NDDOH), Scott Elstad (NDGFD), Dave Fryda (NDGFD), Sandy Hagen (NDGFD), Patrick Isakson (NDGFD), Jason Lee (NDGFD), Greg Power (NDGFD), Fred Ryckman (NDGFD), Lynn Schlueter (NDGFD), Terry Steinwand (NDGFD)

Those who attended the North Dakota All-bird Workshop:

Tom Bodine (ND Farm Bureau), Curt Bradbury (NRCS), Mike Brand (NDSLD), Dan Buchanan (Birding Drives Dakota), Dan Casey (ABC), John Cecil (Audubon), Margi Coyle (UND), Cami Dixon (USFWS), Kathy Duttonhefner (NDNHP), Alexis Duxbury (NDGFD), Steve Dyke (NDGFD), Mike Estey (HAPET), Doug Faulkner (RMBO), Dorothy Fecske (NDGFD), Suzanne Fellows (USFWS), Bob Ford (NABCI), Sandy Hagen (NDGFD), Debbie Hahn (IAFWA), Mike Haupt (NDSLD), Greg Hiemenz (USBR), Renae Hines (NDSU), Patrick Isakson (NDGFD), Rex Johnson (HAPET), Kevin Kading (NDGFD), Gregg Knutsen (USFWS), Brian Kramer (ND Farm Bureau), Randy Kreil (NDGFD), Jennifer Lind (NDSU), Greg Link (NDGFD), Cindy Maier (NRCS), Ron Martin, Scott McLeod (DU), Kelly McPhillips (USBR), Mike Morris (ACOE), Neal Niemuth (HAPET), Bill Palmer (RMBO), Gerry Reichert (TNC), Marco Restani (SCSU), Ron Reynolds (HAPET), Terry Rich (PIF), Eric Rosenquist (TNC), Adam Ryba (USFWS), Andy Schollett (NGPJV), Jill Shaffer (NPWRC), Mark Sherfy (NPWRC), Paulette Sherr (USFWS), John Solberg

(USFWS), Dan Svingen (USFS), Jan Swenson (Badlands Conservation Alliance), Genevieve Thompson (Audubon), Bruce Toay (USFWS), Jeb Williams (NDGFD), Kevin Willis (USFWS)

Those who provided comment on the Species of Conservation Priority list (January and February 2004) and Species Templates (January 2005):

Steve Adair (DU), Joe Carney (LU), Rich Crawford (UND), Dave Dewald (NRCS), Kathy Duttonhefner (NDNHP), Alexis Duxbury (NDGFD), Jacquie Ermer (USFWS), Dorothy Fecske (NDGFD), Chris Grondahl (NDGFD), Joseph Hall (USBR), Jeff Hendrickson (NDGFD), Jay Hestbeck (NPWRC), Bill Jensen (NDGFD), Doug Johnson (NPWRC), Mike Johnson (NDGFD), Gregg Knutsen (USFWS), Stan Kohn (NDGFD), Randy Kreil (NDGFD), Jerry Kobriger (NDGFD), Dave Lambeth, Jeff Lang (UND), Ron Martin, Dave Mushet (NPWRC), Neal Niemuth (HAPET), Greg Power (NDGFD), Randy Renner (NDCTWS), Fred Ryckman (NDGFD), Lynn Schlueter (NDGFD), Bob Seabloom (UND), Dave Stagliano (MTNHP), Dan Svingen (USFS), Rick Sweitzer (UND), Jeff Towner (USFWS), Gene Van Eckhout (NDGFD)

Those who provided comment on the Draft CWCS (July 2005):

Eric Aasmundstad (ND Farm Bureau), Dave Chadwick (IAFWA), Dave Dewald (NRCS), Paul Gertler (USFWS), Jeff Hendrickson (NDGFD), Rex Johnson (HAPET), Jeff Lerner (Defenders of Wildlife), Ron Martin, Neal Niemuth (USFWS), Amelia Orton-Palmer (USFWS), Duane Pool (NGPJV), Gary Preszler (NDSL), Jill Shaffer (NPWRC), Kevin Willis (USFWS)

EXECUTIVE SUMMARY

With the advent of Wildlife Conservation and Restoration Program and State Wildlife Grant legislation, the North Dakota Game and Fish Department can expand its fish and wildlife management programs. SWG resources allow the NDGFD to develop a more robust nongame fish and wildlife program for species that typically receive little or no attention. During the first few years of this program the NDGFD made considerable strides in adding staff to work on nongame and SWG issues. Much of their time the past three years has involved compiling scientific information on an array of fish and wildlife. The NDGFD staff have also worked to develop the state's first species of conservation priority list, networked and built a rapport with many future partners including but not limited to federal, state, and local agencies, nongovernmental organizations, universities, and private citizens; and finally, writing this document.

This document represents a strategy rather than a detailed plan to guide the process of preserving the state's fish and wildlife resources for the foreseeable future. This document is not a compilation of specific management plans for all the species of fish and wildlife at risk in North Dakota. There is simply not the knowledge at this point or the time to compile such a document. This document is also not an implementation plan but rather a strategic vision with the goal of preserving the state's wildlife diversity. North Dakota's CWCS is intended to identify species of greatest conservation need, provide fundamental background information, strategic guidance, and most importantly, a framework for developing and coordinated conservation actions involving partners to safeguard all fish and wildlife resources.

The CWCS is built upon eight essential elements, identified by Congress, with an overall focus on the "species of greatest conservation need." The eight elements include: (1) information on the distribution and abundance of species of wildlife including low and declining populations; (2) descriptions of locations and relative condition of key habitats and community types; (3) problems affecting species and priority research or survey efforts needed; (4) conservation actions needed to conserve the identified species; (5) plans for monitoring species and the effectiveness of conservation actions; (6) plans for reviewing the strategy; (7) coordinating with federal, state, and local agencies and Tribal government on the development and implementation of the strategy; and (8) involve broad public participation. These elements have been open to interpretation by the states. In addressing each of the eight elements, we used the best available information to the best of our ability.

For North Dakota, 100 species of conservation priority were identified under Element 1. This list includes 45 birds, 2 amphibians, 9 reptiles, 15 mammals, 22 fish, and 7 freshwater mussels. Each species was also given a priority designation based on conservation need. Level I species are those having a high level of conservation priority because of declining status in North Dakota or across their range; or have a high rate of occurrence in North Dakota, constituting the core of the species breeding range, but may be at-risk range-wide. Level II species are those having a moderate level of conservation priority; or a high level of conservation priority but a substantial level of non-SWG funding is available to them. Level III species are those having a moderate level of conservation priority but are believed to be peripheral or non-breeding in North Dakota. There are 29 Level I species, 41 Level II species, and 30 Level III species. A sizeable portion of the CWCS provides pertinent biological and habitat information and addresses elements 1-5 for each individual species. Many species do not have existing data relating to population status/dynamics, preferred habitat, threats and conservation actions. In other instances there is a better understanding of the status of a species, the threats affecting them, and the conservation actions needed. Such disparity in information will require additional research and surveys conducted for some species at the same time we are implementing conservation measures for others.

This CWCS is a habitat based, rather than species based. We divided North Dakota into nine primary landscape components, which are essentially the state's major habitat types. They include tallgrass prairie (Red River Valley); Eastern mixed-grass prairie (Drift Prairie); mixed-grass prairie (Missouri Coteau); Western mixed-grass/short-grass prairie (Missouri Slope); planted or tame grassland; wetlands and lakes; rivers, streams, and riparian; badlands; and upland deciduous forest. Details for Elements 2-4 are provided on each of these landscape components (i.e. condition of the habitat, the major problems affecting quality or quantity of it, and the conservation tools available). It is important to recognize that

species of conservation priority often depend on several habitat types or landscape components for survival. The key to ensuring their long term survival is to maintain diverse grasslands, wetlands, woodlands, rivers and streams. This cannot be reduced to certain isolated areas, but must occur over a broad landscape.

Current and desired monitoring efforts for species and habitats are addressed through Element 5. A flexible approach to monitoring yet conduct monitoring with performance measures in mind is needed. The NDGFD and its partners will attempt to continually evaluate conservation actions and treatments through various monitoring designs. New information will help guide and refine the process to allow for best management practices for species and habitat. If conservation actions are found to be ineffective in the management of the target species or habitat, steps will be taken to change the process.

The NDGFD visualizes the CWCS as a dynamic document that will be updated on a regular basis as new information becomes available. There is innovative research being conducted at local, regional and national levels. New incentive programs will likely be developed and staying informed of these to avoid duplication and maximize opportunities to partner is critical. The intent is to update the strategy annually and conduct a formal review every ten years, as element 6 requires continued examination of the CWCS. In addition, species of conservation priority needs may change, adding species to or subtracting from the list. The first official review of the 100 species of conservation priority will occur in five years.

Early on in developing the CWCS, the NDGFD recognized the scope and magnitude of this endeavor and embraced the need to coordinate efforts with partners and solicit their input. We met individually with staff from all principle land management agencies in the state, universities, nongovernmental organizations, and the general public. The feedback we received from these groups and their willingness to participate in focus groups, provide comments on drafts of the CWCS, and their overall support was outstanding. Since these initial meetings we have continued coordinating aspects of the strategy with many of these partners to the point where we view them as integral to the implementation of the strategy. Element 7 contains the underlying strength of North Dakota's CWCS.

The NDGFD is fortunate to have superb communication tools. From early on in the process, the public was informed of CARA, WCRP, SWG, and the CWCS via the NDGFD's monthly magazine, news releases, radio and television programs, website, and other media outlets throughout the state. A request for comments was sought after and welcomed if any was provided. The requirements of element 8 will be sustained throughout the future.

While the completion of the CWCS represents a major achievement and progress towards the goal of preserving North Dakota's fish and wildlife diversity, there is still a long way to go. This CWCS is just the first chapter in long-term multifaceted effort to implement management actions and conservation efforts. The next phase will involve refining goals to put the best available conservation tools into action.

"Without habitat, there is no wildlife. It's that simple."
- Wildlife Habitat Canada